

CLAIMS

What is claimed is:

1. A system for automatically configuring a first communication interface of a device for connection with an external wireless network, comprising:
 - a communication parameter source external to the device to store communication parameters of the wireless network;
 - a second communication interface inside the device to communicate with the communication parameter source for the communication parameters;
 - an interface configuration module coupled to the first and second communication interfaces, wherein the interface configuration module causes the second communication interface to receive the communication parameters, and then configures the first communication interface using the communication parameters such that the device can be connected to the wireless network.
2. The system of claim 1, wherein the second communication interface establishes a secure communication link with the communication parameter source to receive the communication parameters.
3. The system of claim 1, wherein the second communication interface communicates with the communication parameter source wirelessly.
4. The system of claim 1, wherein the first and second

communication interfaces and the interface configuration module reside inside the device while the communication parameter source is located outside the device.

5. The system of claim 1, wherein the communication parameter source is a beacon that broadcasts the communication parameters.

6. The system of claim 1, wherein the communication parameter source is a communication parameter server also connected with the wireless network.

7. The system of claim 1, wherein the first and second communication interfaces employ different wireless communication technologies.

8. The system of claim 1, wherein the interface configuration module detects when the first communication interface needs to be configured with the communication parameters.

9. A method of automatically configuring a communication interface of a device for connection with an external wireless network, comprising:

- (A) providing a second communication interface inside the device;
- (B) causing the second communication interface to communicate with an external communication parameter source for the communication parameters, wherein the communication parameter source stores the

communication parameters of the wireless network;

(C) configuring the first communication interface with the communication parameters received such that the device can be automatically connected to the wireless network.

10. The method of claim 9, wherein the step (B) further comprises the step of broadcasting from the second communication interface a request for the communication parameters wirelessly.

11. The method of claim 9, wherein the step (B) further comprises the steps of
automatically discovering the communication parameter source; and
connecting to the communication parameter source wirelessly.

12. The method of claim 11, wherein the second communication interface is an infrared communication interface that can automatically discover communication partners within range.

13. The method of claim 11, wherein the second communication interface is a short range radio communication interface that can automatically discover communication partners within range.

14. The method of claim 9, wherein the communication parameter source is a beacon that broadcasts the communication parameters.

15. The method of claim 9, wherein the first and second communication interfaces employ different wireless communication technologies.

16. The method of claim 9, the step (B) further comprises the step of establishing a secure communication link before the second communication interface receives the communication parameters from the source.

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